

Serial No. 10/829,209
Amendment dated January 19, 2006
Reply to Office Action of October 19, 2005

Docket No. K-0632

REMARKS/ARGUMENTS

Claims 1, 4 and 18-28 are pending in this application. By this Amendment, claim 1 is amended, and claims 5 and 29-37 are cancelled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Entry is thus requested.

I. Allowable Subject Matter

It is noted that claim 5 is not rejected over art. It is therefore assumed, for purposes of this reply, that claim 5 defines patentable subject matter. Further, the subject matter of allowable claim 5 has been incorporated into independent claim 1. Thus, it is respectfully submitted that independent claim 1, as well as claims 4 and 18-28, which depend therefrom, should be in condition for allowance. It is further submitted that, as all of pending claims 1, 4 and 18-28 should be in condition for allowance, the application should also be in condition for allowance.

II. Rejection(s) Under 35 U.S.C. §103(a)

The Office Action rejects claims 1, 4, 11 and 18-27 under 35 U.S.C. §103(a) over U.S. Patent No. 4,168,842 to Suzuki et al. (hereinafter "Suzuki") in view of Im et al., U.S. Patent Publication No. 2002/0067117 (hereinafter "Im") and U.S. Patent No. 4,168,450 to Yamauchi et al. (hereinafter "Yamauchi"). Claim 11 is cancelled. The rejection, in so far as it applies to remaining claims 1, 4 and 18-27, is respectfully traversed.

Independent claim 1 recites a plurality of strip-type slots aligned uniformly running parallel to each other along an axis of the shadow mask, including at least one angled surface formation on at least one inner side surface of each of the strip-type slots, and a plurality of bridges located between adjacent slots of the plurality of stripe-type slots, wherein each bridge has angled surface portions formed on each inner side surface thereof, wherein a thickness of the angled surface portions of each of the plurality of bridges is smaller than a thickness of an area of the shadow mask having no angled surface. As acknowledged by the Examiner in the remarks regarding independent claim 1, Suzuki neither discloses nor suggests such features.

More specifically, Suzuki discloses a shadow mask 25 with apertures 31 formed in parallel columns separated by beam intercepting bridge portions 32. Suzuki neither discloses nor suggests that any of the inner side surfaces of the shadow mask 25 are angled, let alone those which form the inner side surfaces of the apertures 31 or the bridges 32, as are the inner side surfaces of the slots and bridges recited in independent claim 1. Thus, Suzuki necessarily neither

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discloses nor suggests a relative thickness of such angled surface portions of the bridges, as recited in independent claim 1. Further, as acknowledged by the Examiner in the remarks regarding independent claim 1, Im fails to overcome the deficiencies of Suzuki.

That is, Im discloses a shadow mask 10, with a first embodiment including a plurality of slots 13 separated by real and dummy bridges 14 and 15, and a second embodiment including a plurality of slots 33 connected by dummy bridges 35. Although Im discloses various orientations for the side surfaces of the various slots, Im suffers deficiencies similar to Suzuki with respect to the bridges. More particularly, the dummy bridges disclosed by Suzuki are simply smaller slots which connect the larger slots to form one, elongated slot, and are thus not comparable to the bridges recited in independent claim 1. Further, the real bridge 14 is simply a squared off portion between adjacent slots 13, and while the bridge 14 may vary in width and height, the bridge 14 does not include any angled surfaces, let alone angled surface portions formed on each inner side surface of any of the bridges, as recited in independent claim 1. Thus, Im necessarily neither discloses nor suggests a relative thickness of such angled surface portions of the bridges, as recited in independent claim 1. Further, Yamauchi fails to overcome the deficiencies of Suzuki and Im.

Yamauchi discloses a shadow mask 10 including a plurality of slots 14 connected by a plurality of bridges 15, with an inner surface of the bridges 15 inclined in parallel with electron beams passing therethrough (see column 4, lines 39-54 of Yamauchi) so as to eliminate problems

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with halation and ghosting (see column 3, lines 46-48 of Yamauchi). However, Yamauchi is silent as to the thickness of the inclined surface, and neither discloses nor suggests that any such dimension is critical in achieving the desired result. Thus, Yamauchi necessarily neither discloses nor suggests that a thickness of the angled surface portions of the bridges is smaller than a thickness of an area having no angled surface, as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 is allowable over Suzuki, Im and Yamauchi, either alone or in combination, and thus the rejection of independent claim 1 under 35 U.S.C. §103(a) over Suzuki, Im and Yamauchi should be withdrawn. Dependent claims 4 and 18-27 are allowable at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

The Office Action rejects claims 29-33, 35 and 36 under 35 U.S.C. §103(a) over Suzuki and Yamauchi in view of U.S. Patent No. 6,485,884 to Wolk et al. (hereinafter “Wolk”). Claims 29-33, 35 and 36 are cancelled, and thus the rejection is moot.

The Office Action rejects claims 28, 34 and 37 under 35 U.S.C. §103(a) over Suzuki and Im, or alternatively, over Suzuki, Yamauchi and Wolk in view of Korean Patent Publication No. 2001 087952 (hereinafter “KR ‘952”). Claims 34 and 37 are cancelled. These rejections, in so far as they apply to remaining claim 28, are respectfully traversed.

Dependent claim 28 is allowable over Suzuki, Im and Yamauchi, either alone or in combination, at least for the reasons set forth above with respect to independent claim 1, from

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which it depends, as well as for its added features. Further, Wolk is merely cited as allegedly teaching slot alignments, and KR '952 is merely cited as allegedly teaching shapes of strip type slots. Thus, Wolk and KR '952 each fail to overcome the deficiencies of Suzuki, Im and Yamauchi. Accordingly, it is respectfully submitted that claim 28 is allowable over the applied combinations, and thus the rejections should be withdrawn.

III. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, **JOANNA K. MASON**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

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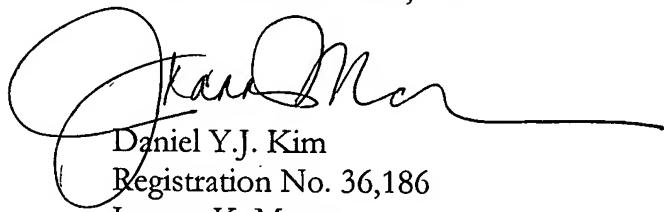
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concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and
please credit any excess fees to such deposit account.

Respectfully submitted,
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